4.11 INFRASTRUCTURE

This section discusses the impacts of the project to the local infrastructure including the current utilities and facilities in the area of the proposed project. This section also discusses waste management issues. Roads are discussed in Section 4.12, Transportation.

4.11.1 Utilities and Facilities

4.11.1.1 *Western Corridor*

Construction of the proposed project in the Western Corridor would result in the following changes to the existing infrastructure:

- Tucson Electric Power Company's (TEP) existing South Substation would be expanded to accommodate the 345-kV line to the new Gateway Substation. The addition of the second 345-kV circuit would require an 100-ft (30-m) expansion to the existing fenceline.

- The new Gateway Substation would be constructed within a developed industrial park north of Mariposa Road (SR 189), an estimated 0.5 mi (0.8 km) east of the Coronado National Forest boundary (Northeast 4, Section 12, Township 24 South, Range 13 East). The TEP portion of the site is an estimated 18 acres (7.3 ha) and is within the City of Nogales, Arizona. TEP has already performed pre-construction activities for preparation of the site.

- A new 345-kV transmission line would be constructed for a length of an estimated 65.7 mi (106 km). The maximum height of the structures for the 345-kV transmission line would be 140 ft (42.7 m). The length of the new 345-kV transmission line would be an estimated 29.5 mi (47.5 km) on the Coronado National Forest, and an estimated 1.25 mi (2.01 km) on Federal lands managed by the Bureau of Land Management (BLM).

No additional impacts to existing infrastructure would be expected from implementation of the Western Corridor. The proposed transmission line is no greater a terrorist target than any other extra high voltage transmission line in the United States. The worst case terrorist scenario would be that several transmission line poles are felled and that it takes a few days to a couple of weeks to replace them and restring the conductors. The interconnected transmission system is designed with redundancy to accommodate such a situation (TEP 2003).

4.11.1.2 *Central Corridor*

The only difference to the changes to infrastructure described above for the Western Corridor compared to the Central Corridor is the length of the new transmission line. The new 345-kV transmission line would be constructed for a length of an estimated 57.1 mi (91.9 km). The length of the new 345-kV transmission line would be an estimated 15.1 mi (24.3 km) on the Coronado National Forest.

No additional impacts to existing infrastructure would be expected from implementation of the Central Corridor, and the potential impacts from terrorism would be as described for the Western Corridor.

4.11.1.3 *Crossover Corridor*

The only difference to the changes to infrastructure described above for the Western Corridor compared to the Crossover Corridor is the length of the new transmission line. The new 345-kV transmission line

would be constructed for a length of an estimated 65.2 mi (105 km). The length of the new 345-kV transmission line would be an estimated 29.3 mi (47.2 km) on the Coronado National Forest.

No additional impacts to existing infrastructure would be expected from implementation of the Crossover Corridor, and the potential impacts from terrorism would be as described for the Western Corridor.

4.11.1.4 *No Action Alternative*

Under the No Action Alternative, TEP would not build the proposed transmission line and associated facilities as proposed in this Environmental Impact Statement (EIS). There would be no changes to the existing infrastructure in the project area.

4.11.2 Waste Management

4.11.2.1 *Western Corridor*

During construction of the project, the storage and use of fuel, lubricants, and other fluids during the construction phase of the facilities and access roads could create a potential contamination hazard. Spills or leaks of hazardous fluids could contaminate groundwater and affect aquifer use. This impact would be minimized or avoided by restricting the location of refueling activities and by requiring immediate cleanup of spills and leaks of hazardous materials. TEP would implement a Spill Prevention Control and Countermeasures Plan (SPCC) to prevent, control, and minimize impacts from a spill of fuels or other hazardous substances during construction of the transmission line. The following measures would be incorporated into the plan: preventative measures, spill response, and reporting procedures (TEP 2003).

Oil and diesel fuel would be stored in clearly marked tanks onsite that would be provided with secondary containment structures. Construction equipment would be maintained regularly, and the source of leaks would be identified and repaired. Any soil contaminated by fuel or oil spills would be removed and disposed of by a contractor to an approved disposal site. Lubricating oils, acids for equipment cleaning, and concrete curing compounds are potentially hazardous wastes that may be associated with construction activities. These would be placed in containers within secondary containment structures onsite, and disposed of at a licensed treatment and/or disposal facility in accordance with local or state regulations and in compliance with the manufacturer's recommendations. Paint containers would be tightly sealed to prevent leaks or spills. Excess paint would not be discharged to the stormwater system but disposed of consistent with manufacturer's recommendations and according to applicable governmental regulations.

Septic wastes generated during construction would be provided for by the use of temporary portable sanitary facilities. Vegetative debris collected during right-of-way (ROW) and structure site clearing would be scattered adjacent to the ROW to create habitat or reduce surface erosion where it would not be considered a potential fire danger.

Operational wastes generated at substations would include minor quantities of municipal solid waste. This waste would usually be paper and plastic wrapping materials from new equipment. No hazardous waste would be generated from substation operation. The amount of wastes generated from construction and operation would be too small to affect the life expectancy of the many municipal solid waste facilities currently operated in the project area, as listed in Section 3.11.2.

4.11.2.2 *Central Corridor*

The waste management issues and the SPCC Plan described above for the Western Corridor also apply to the Central Corridor.

4.11.2.3 *Crossover Corridor*

The waste management issues and the SPCC Plan described above for the Western Corridor also apply to the Crossover Corridor.

4.11.2.4 *No Action Alternative*

Under the No Action Alternative, TEP would not build the proposed transmission line and the associated facilities as proposed in this EIS. TEP would generate no additional wastes and the potential for spills of hazardous materials or wastes from this project to affect local soils or groundwater would be eliminated. Waste management facilities in the area, as described in Section 3.11.2, Waste Management, would continue current operations.